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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/995,226 | 11/27/2001 | Patrick P. Hicks | 2070.004500/P6761 | 9652 |

7590 07/29/2002

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EXAMINER

ABRAMS, NEIL

ART UNIT

PAPER NUMBER

2839

DATE MAILED: 07/29/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/995226

Applicant(s)

Examiner

Abrams

Group Art Unit

2839

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- ☐ Responsive to communication(s) filed on _____
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-25 is/are pending in the application.
- ☐ Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-25 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement

Application Papers

- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some* ☐ None of the:
 - ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

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Title objected to; it should be ^{more}~~more~~ specific. Abstract should be changed to refer to "coplanar circuit boards", to "power and guide modules" and to use of "contact wafers". A new abstract on a separate sheet is required.

Claims 3, 13-17, 18-22, 23-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 3, 14, is "signal" correct? Power lines usually provide voltage not signal. Claim 13, reference to "supporting members" without clear tie in with other features or use is unclear, lines 4-9 are unclear, what correctors are referred to? Should terms be "contact portions" to refer to sets 515, 525, etc.

Claim 19 is also unclear. Claim 20 is unclear, terms "and expanding" seems incorrect. Claim 23 is unclear, usually the connector is referred to as being provided to the board. Claim 24 is unclear, line 2 also includes an error.

Claims 1-25 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over anyone of Amberg, Chen (both), Lee, Habegger, Heberling, Fox, Leman or Gierut.

All references show boards parallely coupled. Gierut, see 12, 12, Leman, see figs. 2, 6, Habegger, see boards 28, 14, 28, 29. Also note Chen 182, boards 30, 40.

For claim 3, for each reference, certain contacts read as power modules. Claim 4, note Chen 354; guides 32, 26 read as modules.

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For claim 5, note Lee, fig. 3, support, 48 and contact modules (wafers) 50a, 50b, 50c, 50d as well as support 20 and wafers 22a, 22b. For claim 11, term switch readable on circuit board as components, see 21 of Habegger 18 of Gierut. For claim 19, note Habegger, right angle connector 32. For Fox, certain contacts 40 are readable as male and female contacts and a power contact (module). Part J forms a guide module.

Claims 1, 2, etc. also met by Habegger boards 20, 22, 21, 30, 14 stacked one over the other and by Chen 182, boards 40, 50. For any claim should issues arise, recited features deemed obvious variations.

Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen 182 or Habegger, either one alone or taken in view of Broeksteeg, Amberg, Lee, Provencher, Fox and HDM.

For claims 2, 9, obvious to form Chen parts 41, 31 or 42, 51 as male and female connectors in view of Amberg at 14, 16, HDM, Provencher, Broeksteeg and Lee. Also obvious to use power modules and guide modules in view of HDM and Fox at J.

For claims 5, 7, 16, 17 also obvious to use a connector with supports and wafers in view of Lee (support 48, wafers 50a, 50b, 50c, 50d or support 20, wafers 22a, 22b), Provencher, support 110 wafers 114 and Broeksteeg, supports 102, 102', wafers 60.

For Habegger, obvious to form connectors 31, 22 or those between 20, 22 and between 20, 21 as male and female types in view of Amberg, HDM, Provencher, Broeksteeg and Lee. Other features treated as discussed above.

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Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heberling or Amberg, or Leman alone or in view of Broeksteeg, Amberg, Lee, Provencher, Fox and HDM.


Obvious to form the main reference systems (Leman, figs. 2, 6) with mating male and female connectors in view of Amberg, etc. all applied as above.

Other features treaded as discussed above.

Any inquiry concerning this communication should be directed to N. Abrams at telephone number (703) 308-1729.

N. Abrams/mm

07/24/02


NEIL ABRAMS
EXAMINER
ART UNIT 322